

TYPE 2 DIABETES AND FITNESS



**Taking an Active
Approach to
Your Health**

Fitness Matters

Fitness plays a special role for people who have type 2 diabetes. Being fit means becoming healthier by adding activity to your day. You can also improve your fitness level by taking care of your health and watching what you eat. This booklet outlines some fitness benefits. It also gives tips on how you can set and reach fitness goals.



The Road to Fitness

Pacing yourself is the key to becoming fit. Think small. Choose activities you know you can do. You may start simply by moving around a bit more. As your comfort level rises, you can then increase your activity level.

A Little Goes a Long Way

Reaching a fitness goal can be as easy as you choose to make it. You don't have to work hard to get benefits. And a fitness plan can be fun. Keep these tips in mind:


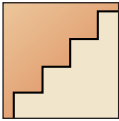




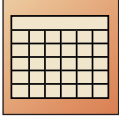
- Choose activities you enjoy doing. Also, get your family and friends involved in your plans.
- A few minutes of activity on most days make a difference. You don't have to "sweat it out" for hours.
- The saying "No pain, no gain" is nonsense. The best fitness plan is one that matches your abilities.
- Being fit can help you lose weight. Losing as few as 5 to 10 pounds can reduce certain health risks.

This booklet is not intended as a substitute for professional medical care. Only your doctor can diagnose and treat a medical problem.

©1999, 2007, 2010 The StayWell Company.
www.krames.com 800-333-3032 All rights reserved.

Where Do You Stand Today?

Write your responses to the statements below. They can help you learn about your current fitness level. A “Yes” answer shows that you may already know some steps involved with being fit. If you answer “No” to any of the statements, be sure to carefully read the section that goes with the page number to learn more.

		Yes	No
	Before You Start..... page 4 I visit my healthcare provider regularly to check how well my diabetes is being managed.	<input type="checkbox"/>	<input type="checkbox"/>
	Benefiting from Simple Activity..... page 6 I know that small steps and gentle movements can improve my fitness and overall health.	<input type="checkbox"/>	<input type="checkbox"/>
	Being Active Throughout the Day..... page 8 Whenever I can, I find ways to add more activity to my day.	<input type="checkbox"/>	<input type="checkbox"/>
	Building Up to Brisk Exercise..... page 10 I can name indoor and outdoor exercises that I enjoy doing and that get my heart beating faster.	<input type="checkbox"/>	<input type="checkbox"/>
	Making Good Nutrition a Habit..... page 12 My normal, healthy diet is enough to keep me going when I’m active regularly.	<input type="checkbox"/>	<input type="checkbox"/>
	Caring for Active Feet..... page 13 I know the basics of foot care and how to prevent foot problems.	<input type="checkbox"/>	<input type="checkbox"/>
	Tracking Your Progress..... page 14 I keep a record of my activity and other health information, such as blood sugar readings.	<input type="checkbox"/>	<input type="checkbox"/>



Before You Start

Talk to your doctor or other healthcare provider. He or she may want you to have a checkup before you become more active. Also, having certain tests first helps you and your doctor learn how you will respond to a fitness program.

Your Checkup

A medical checkup helps ensure that your fitness plan will bring you the most benefit. As part of your checkup, you may receive a **hemoglobin A1C test**. This test measures your average glucose (sugar) level over about a 3-month period. Your results may be provided as a percentage or as an estimated average glucose (eAG) reading. The doctor may also want to check your:

Heart. Diabetes can cause heart problems. But a fitness program can help them get better. Being fit can also help improve your cholesterol and blood pressure levels.

Feet. People who have diabetes can have problems with their feet. Your doctor can check your feet before you become more active.

Eyes. Healthy blood vessels in your eyes may be a sign that your diabetes is well managed. Visit an eye doctor at least once a year.

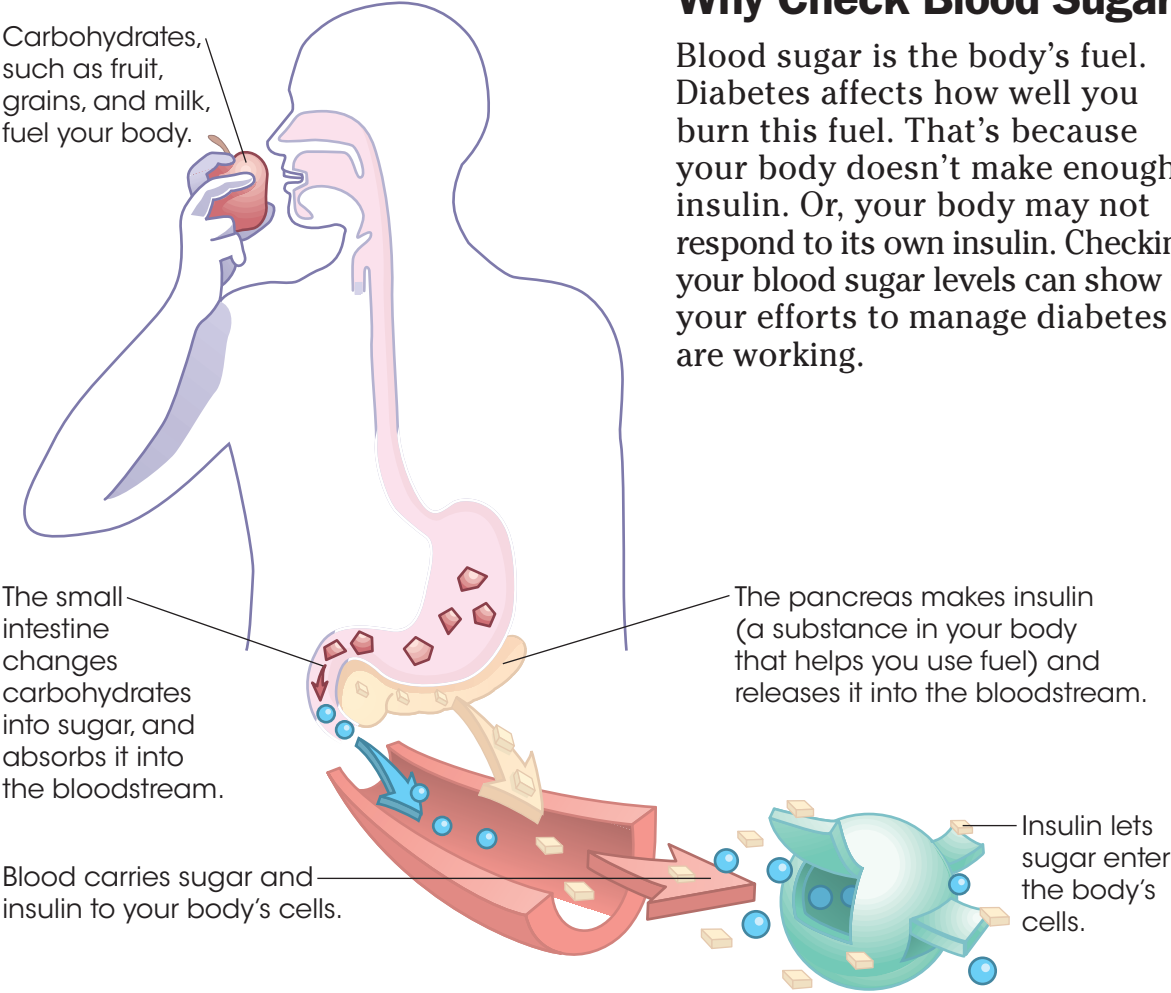
If You Have an Exercise Stress Test

An exercise stress test can show how your heart responds to activity. You will have small electrodes placed on your chest. You will then walk on a treadmill or ride an exercise bike while your heart rate is monitored. If you have this test, your doctor will give you more details.



Why Check Blood Sugar?

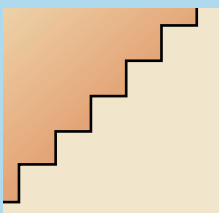
Blood sugar is the body's fuel. Diabetes affects how well you burn this fuel. That's because your body doesn't make enough insulin. Or, your body may not respond to its own insulin. Checking your blood sugar levels can show if your efforts to manage diabetes are working.



Questions for Your Healthcare Provider

You may have lots of questions about diabetes and fitness. Write them down on the lines below. Then ask your healthcare provider about them at your next visit.

1. *Do I need to eat more carbohydrates when I'm active?*
2. *When is the best time for me to exercise?*
- 3.
- 4.
- 5.



Benefiting from Simple Activity

Even small movements can greatly improve your health. Simple activity can also boost your mental outlook. And you may spend less money on your healthcare. Think of it this way: Small steps may take you a long distance.

What Can You Improve?

Mental health

Physical activity relieves stress and helps you sleep better. It can give you a greater sense of well-being, too.

Blood sugar

By being fit, you can improve blood sugar levels. Then you may need less medication to manage your diabetes.

Weight

You can lose fat, gain muscle, and maintain a healthy weight by being more active.

Small blood vessels

Activity can lower blood sugar. This may make small blood vessels healthier, reducing the risk of eye or other problems.

Heart health

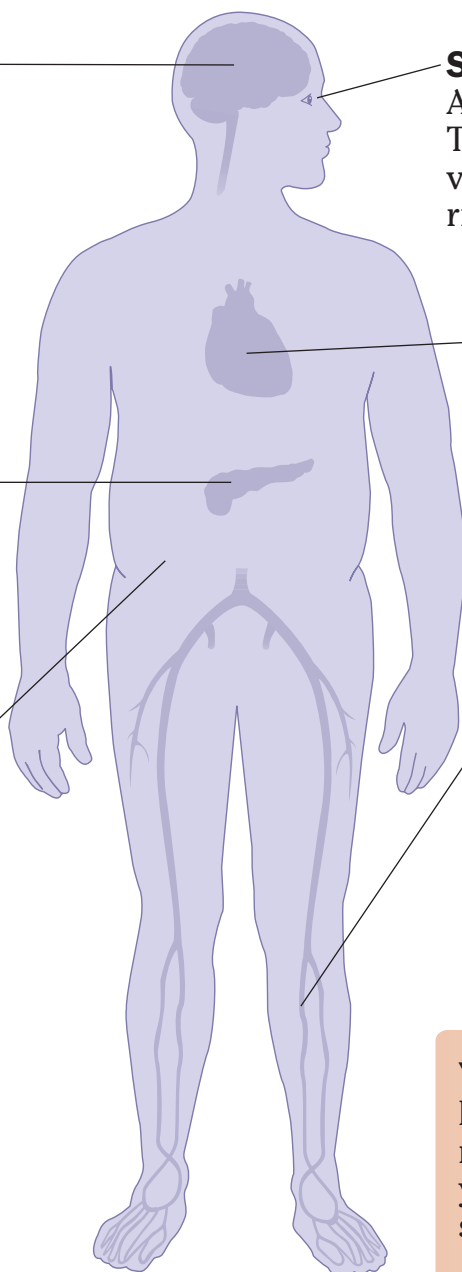
You can reduce your risk of heart disease and high blood pressure with fitness. You can also improve cholesterol levels.

Large blood vessels

Activity can improve the health of large blood vessels. This may mean better blood flow and fewer foot and leg problems.

Your wallet

Fitness can save you money, too. If you manage your blood sugar, you may spend less on medical care.



Start with Movement

Do you think fitness means a sweaty day at the gym? Don't. The truth is, you don't need to join a gym to start moving. If you're not used to being active, start with gentle movements while you watch TV. Raise your arms and legs while seated. Then repeat for 5 to 10 minutes. With time, add some slow walking. Even taking a flight of stairs instead of the elevator can lift you to healthier heights. These types of brief activities are great ways to get started. They may help lower your blood sugar levels, strengthen your heart, and improve your energy.



Steps Toward Being More Active

Your goal, especially at first, is to keep your activity simple. Slowly work up to 30 minutes of activity a day. But you don't need to do it all at once. You can be active in three 10-minute sessions a day. You can also combine being active with the other things you need to do. For instance, stand up from your desk and walk around often when at work. Or, go for a walk around the mall before you shop.





Being Active Throughout the Day

Once you've added some movement to your day, you can become even more active. The key is to find an activity that you enjoy. Mapping out a plan can help you fit that activity into your day.

Keep Your Activity Simple

Why make activity hard on yourself? Choose things that you like to do. Or, find activities that fit easily into your schedule. Here are some simple ways to keep your day active:

- Get off the bus a stop or two early and walk the rest of the way.
- Run small shopping errands on your bike.
- Go for a 10-minute walk after each meal. And take the dog, too.
- Park your car in the space farthest from where you're going.

Make Your Activity Fun

Mix fitness with fun. The more fun you have, the more likely you are to stick to your plan. This means you can have better blood sugar levels along with an active, fun day. Try these hints:

- Join a social club that goes for walks or does other physical activities.
- Go bird watching or do something else that gets you outdoors.
- Put on some music and dance to a couple of songs.
- Involve your family or friends in your physical activity.



What Will You Do?

Spend a moment planning your activity. When will you be active each day? What will you do to become active? Keep your plan handy so you can see it often. Read the sample activities below. Then add some of your own.

Mornings:

- I'll stretch while watching the morning news on TV.

- _____
- _____
- _____

Afternoons:

- I'll arrange a walking meeting with coworkers.

- _____
- _____
- _____

Evenings:

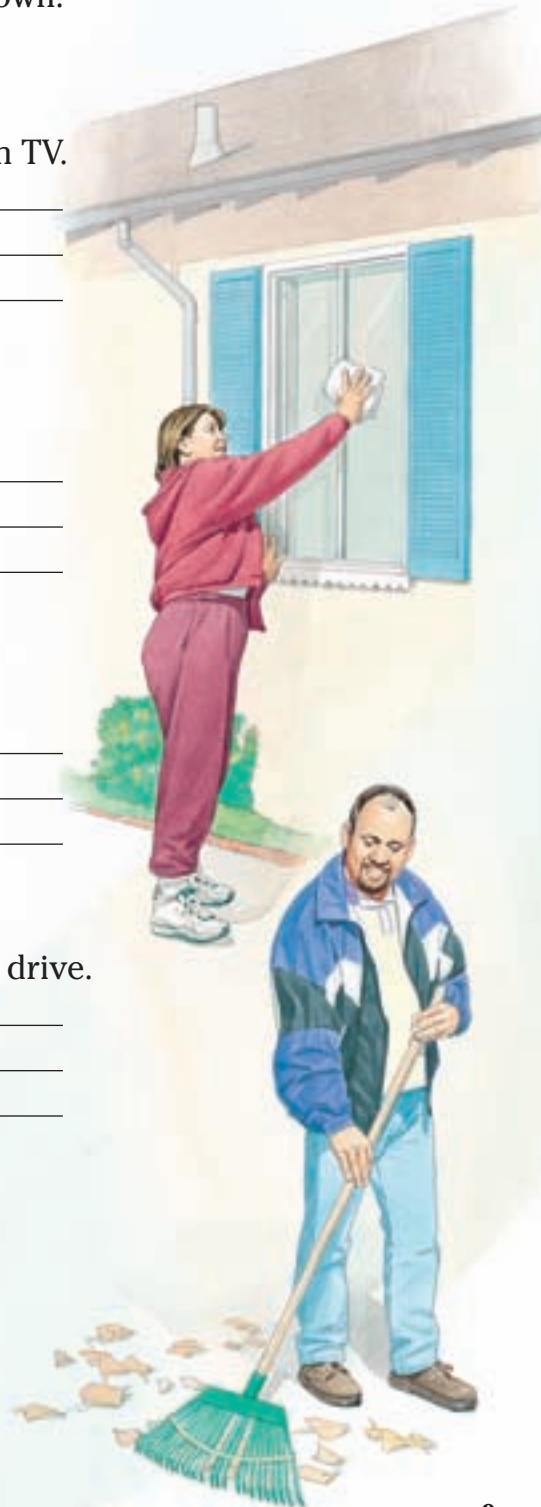
- I'll wash windows or rake leaves after dinner.

- _____
- _____
- _____

Weekends:

- I'll ride my bike to a friend's house rather than drive.

- _____
- _____
- _____





Building Up to Brisk Exercise

Now that you're more active, you may be ready to increase the pace. Choose an exercise you enjoy. Just be sure to warm up, cool down, and stay safe. And learn when it's time to stop exercising.



Benefit from Briskness

Brisk activity gets your heart beating faster. This can help you increase your fitness, lose extra weight, and manage your blood sugar levels. Try brisk walking or jogging. Or, if you have foot or leg problems, you can try swimming or bike riding. No matter what your activity, work up to 30 minutes of steady, brisk exercise on most days.

Warm Up and Cool Down

Warming up and cooling down reduce your risk of injury. They also help limit muscle soreness. Do a mild version of your activity for 5 minutes before and after your routine. You can also learn stretches that will help keep your muscles loose. Your healthcare provider may show you good ways to warm up and stretch.

Safety Tips

These tips can help you stay safe as you become fit:

- Exercise with a friend so you're not alone, and carry identification.
- Wear a medical alert bracelet that says you have diabetes.
- Use the proper footwear and safety equipment for your activity.
- Drink water before, during, and after exercise.
- Dress properly for the weather.
- Don't exercise in very hot or very cold weather.
- Don't exercise if you are sick.

Add a Little Resistance

Resistance exercises strengthen muscles and help the body use insulin. They also help maintain bone health. Ask your healthcare provider if you should add this type of exercise. He or she might suggest working with stretchy resistance bands or light weights a few days each week.

Do the Talk-Sing Test

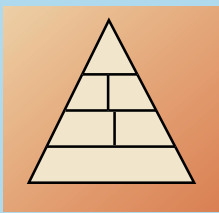
The talk-sing test is a simple way to tell how hard you're exercising. If you can talk while exercising, you're in a safe range. But if you're out of breath, slow down. On the other hand, if you can carry a tune, it's time to pick up the pace. Walk up a hill. Increase the resistance on your stationary bike. Or, swim faster.



When to Stop Exercising and Call Your Doctor

Stop exercising and call your doctor right away if you notice any of the following:

- Pain, pressure, tightness, or heaviness in the chest
- Pain or heaviness in the neck, shoulders, back, arms, legs, or feet
- Unusual shortness of breath
- Dizziness or feeling lightheaded
- Unusually rapid or slow pulse
- Increased joint or muscle pain



Making Good Nutrition a Habit

Food is fuel. It gives you the energy you need to function each day. In most cases, becoming more fit doesn't require changing your eating habits. Just be sure to drink plenty of water. And follow your healthy eating plan.

Stick to a Healthy Diet

Talk to a registered dietitian if you're changing your activity level. You can learn whether you need to eat differently. In most cases, your eating plan will stay the same. As a rule, make sure you eat three balanced meals a day. Don't skip meals. And eat the right amount of carbohydrates daily.

Get Enough Fluids

When you're active, be sure to drink plenty of water. Have a glass of water (not juice) before you get started with your activity. Then carry a full water bottle with you. Also, drink another glass of water when you're cooling down.

Do I Need to Eat When Exercising?

In most cases, you don't need to eat while being active. And you don't have to "carbo load" before exercise. This is true especially if you don't take insulin. Eating balanced meals and snacks will give you enough energy. If you take insulin or medication that can cause low blood sugar, carry something that will raise your blood sugar level quickly. This includes glucose tablets, hard candy, or fruit. Eat it only if you feel low blood sugar symptoms.





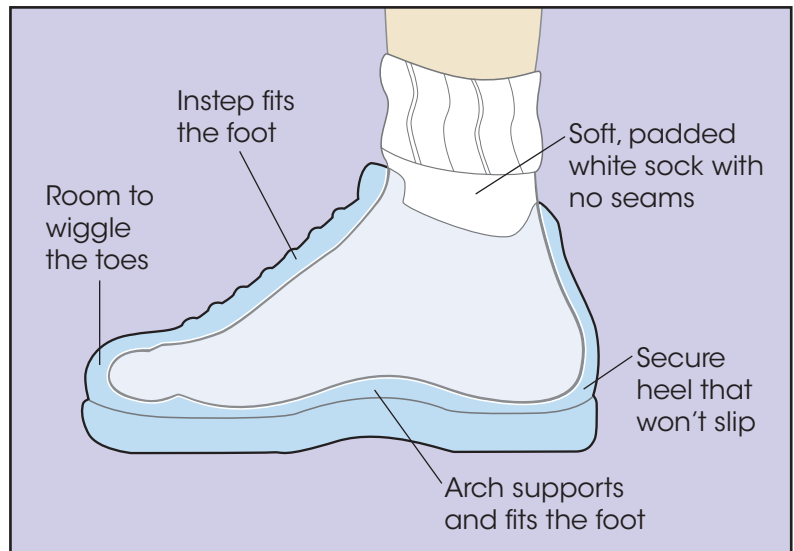
Caring for Active Feet

Because you have diabetes, your feet require special care. Your doctor may have examined your feet and said it's OK to start being more active. But you still need to check your feet daily to make sure there are no problems.

The Basics of Wear and Care

Proper footwear helps keep your feet healthy. Be sure to follow these tips:

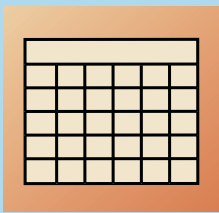
- Wear the right shoe for your activity. For instance, a running shoe is designed to keep your feet injury-free while jogging.
- Choose a shoe that has room for your toes to wiggle. But your heel should not slip. Your foot should also fit comfortably within the instep.
- Wear soft, seamless, and well-padded white socks for activity.
- Check your feet after your activity.
- Dry your feet before putting your shoes and socks on.



How to Check Your Feet

Inspect your feet daily for problems. Be sure to look between the toes and behind the heels. A hand-held mirror may help you see the bottoms of your feet better. If you can't check your feet, have someone do it for you. Call your healthcare provider if you notice any of these symptoms:

- Color changes, redness, streaking, or swelling
- Feet that feel hot or cold, numb, or tingly
- Cracks, sores, or cuts anywhere on your feet
- An ingrown toenail



Tracking Your Progress

Tracking your fitness progress can help you improve your long-term health. Seeing how far you've come may motivate you to achieve more. Your doctor can also use a record of any progress to help plan your treatment.



Recording Blood Sugar Levels

Your healthcare provider may have shown you how to check your blood sugar. Now that you're more active, you may want to check it more often. Keep a blood sugar log. That way, you can see how your efforts are paying off. You may also include a column for blood sugar readings in a fitness log (see next page). Bring any log books with you on doctor visits. Your doctor can use these records to help decide whether to adjust your medications.



Setting a Fitness Goal

A fitness goal gives you something to reach for. Set a goal you can achieve. It does no good if your goal is beyond your ability. And choose a goal that focuses on action. For instance, your first goal may be to take two 10-minute walks a day for one week. After you reach your first goal, try making the next one more challenging. Fill in the blanks below to get started.

My first goal is to: _____ . I will try to reach that goal in this much time: _____ by taking the following steps:

- _____
- _____
- _____

Keeping a Fitness Log

Include the information that matters most to you in your fitness log. This may be how you felt before, during, or after exercising. And don't forget to record your blood sugar reading. As time goes on, compare your first entry with more recent entries. You may see a rise in your fitness level and a drop in your blood sugar. Here's how a fitness log might look:



Sample Fitness Log

Date/ time	My activity and for how long	My blood sugar after activity	How I felt
[sample entry]			
3/28 7 a.m.	Walked a quick loop around the park—20 min.	140	Felt great; was thirsty, but had my water bottle.

Your Fitness Reward

Your chances of reaching a goal increase if you plan a reward. Write down a nonfood reward that matters to you. For instance, you might reward yourself with a night at the movies, a new warm-up suit, or some relaxing music.

For reaching my first goal, I will reward myself with: _____.

A Lifetime of Fitness

Make fitness a lifelong goal. You may look and feel better. And you may lower your blood sugar levels. Fitness can also help you gain energy, strength, and control over your diabetes and overall health.

Resources

The organizations below can offer advice on many health issues. Call them or visit their websites to learn more.

- About diabetes and fitness:
American Diabetes Association
800-342-2383
www.diabetes.org
- About healthy eating:
American Dietetic Association
www.eatright.org
- About quitting smoking:
American Lung Association
800-586-4872
www.lungusa.org



Consultants:

Maureen McGrath, RN, MSN, CNP, CDE
Sherri Thibeaux Shafer, RD, CDE

With contributions by:

Ann Albright, PhD, RD
David Klonoff, MD, Endocrinology
Gail Sulander, MS, RD
Janet Thigpen, RD/LD, CDE

Take our Patient Survey. Help us help other patients. Please visit www.kramesurvey.com to provide your feedback on this booklet.

KRAMES®
PATIENT EDUCATION

A MediMedia Company

www.krames.com 800-333-3032